

Experiment Number: 99930-99

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:13:05

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96005
Lock Date: Not Entered.
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date NONE

Experiment Number: 99930-99

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Lab: NCTR

Alimentary System

Cardiovascular System

Blood Vessel + 1
Heart + 1

Endocrine System

General Body System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

± ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

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Lab: NCTR

Genital System

Hematopoietic System

Integumentary System

Musculoskeletal System

* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F0 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 8 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 1 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bone, Femur | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nervous System | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain | | A | | | | | | | | | | | | | | | | | | | 0 |
| Respiratory System | | A | | | | | | | | | | | | | | | | | | | |
| Lung | | A | | | | | | | | | | | | | | | | | | | 0 |
| Nose | | A | | | | | | | | | | | | | | | | | | | 0 |
| Trachea | | A | | | | | | | | | | | | | | | | | | | 0 |
| Special Senses System | | A | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | A | | | | | | | | | | | | | | | | | | | |
| Kidney | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | 24 |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | 25 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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A ..Autolysis precludes evaluation

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Time Report Requested: 14:13:06

First Dose M/F: NA / NA

Lab: NCTR

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 9 | 9 | 9 | 0 | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 0 | 0 | 1 |
| | 1 | 3 | 4 | 7 | 8 | 1 | 4 | 7 | 8 | 9 | 0 | 0 | 8 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 6 | 7 |

Alimentary System

Liver

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Hematopoietic System

NONE

* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

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Alimentary System

Cardiovascular System

NONE

Endocrine System

General Body System

NONE

Genital System

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F0 500 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | |
| | | 5 | 5 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 7 | 7 | 7 | 7 | 1 | 2 | 2 | |
| | | 6 | 9 | 0 | 6 | 7 | 9 | 1 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | 1 | 2 | 3 | 4 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | | | | | |
| Rete Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Seminal Vesicle | | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymphoma Malignant | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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Date Report Requested: 10/22/2014

Time Report Requested: 14:13:06

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F0 500 PPM

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 5 | 5 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 7 | 7 | 7 | 7 | 1 | 2 | 2 | 2 | 2 |
| 6 | 9 | 0 | 6 | 7 | 9 | 1 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | 1 | 2 | 3 | 4 | 8 | 9 | 0 | 1 | 2 |

Urinary System

Kidney

SYSTEMIC LESIONS

Multiple Organ

Lymphoma Malignant

1

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99930-99

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F0 0 PPM | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 7 |
| | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 7 | 8 |

Alimentary System

| | | |
|---------------------------|---|----|
| Esophagus | + | 1 |
| Intestine Large, Cecum | + | 1 |
| Intestine Large, Colon | + | 1 |
| Intestine Small, Duodenum | + | 1 |
| Intestine Small, Ileum | + | 1 |
| Intestine Small, Jejunum | + | 1 |
| Liver | + | 26 |
| Pancreas | + | 1 |
| Salivary Glands | + | 1 |
| Stomach, Forestomach | + | 1 |
| Stomach, Glandular | + | 1 |

Cardiovascular System

Heart + 1

Endocrine System

General Body System

NONF

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:13:07

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F0 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 7 | 8 | |
| | | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 0 | 5 | 6 | 7 | |

Genital System

Hematopoietic System

Integumentary System

Musculoskeletal System

Nervous System

Brain, Brain Stem + 1
Brain, Cerebellum + 1

* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

3

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Lab: NCTR

| CD Rat Female F0 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebrum | + | | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | | | | | | | | | | | | | | | | | | | | | 1 |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Lab: NCTR

CD Rat Female
F0 5 PPM

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 7 | 7 | 7 | 8 | 8 | 8 | 3 | 3 | 3 | 3 | 3 | 8 | 8 |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 1 |
| | | | | | | | | | | | | | | | | | | | 2 | 3 |
| | | | | | | | | | | | | | | | | | | | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | 6 | |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

25

SYSTEMIC LESIONS

Multiple Organ

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

25

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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A ..Autolysis precludes evaluation

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Time Report Requested: 14:13:07

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F0 100 PPM**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 8 | 9 | 9 |
| | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 7 | 8 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 |

***TOTALS**

Alimentary System

| | | |
|------------------------------|---|---|
| Esophagus | + | 1 |
| Intestine Large, Cecum | + | 1 |
| Intestine Large, Colon | + | 1 |
| Intestine Small, Duodenum | + | 1 |
| Intestine Small, Ileum | + | 1 |
| Intestine Small, Jejunum | + | 1 |
| Liver | + | 1 |
| Pancreas | + | 1 |
| Salivary Glands | + | 1 |
| Stomach, Forestomach | + | 1 |
| Stomach, Glandular | + | 1 |
| Cardiovascular System | | |

Cardiovascular System

Heart + 1

Endocrine System

| | | |
|-----------------|---|---|
| Adrenal Cortex | + | 1 |
| Adrenal Medulla | + | 1 |
| Pituitary Gland | + | 1 |
| Thyroid Gland | + | 1 |

General Body System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

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Experiment Number: 99930-99
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:13:07

First Dose M/F: NA / NA

Lab: NCTR

Genital System

Hematopoietic System

| | | |
|------------------------|---|---|
| Bone Marrow | + | 1 |
| Lymph Node, Mandibular | + | 1 |
| Lymph Node, Mesenteric | + | 1 |
| Spleen | + | 1 |
| Thymus | + | 1 |

Integumentary System

26
2

Musculoskeletal System

| | | |
|-----------------------|---|---|
| Bone, Femur | + | 1 |
| Nervous System | | |
| Brain, Brain Stem | + | 1 |
| Brain, Cerebellum | - | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99930-99

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:13:08

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F0 500 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 9 | 9 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | |
| | | 0 | 1 | 2 | 3 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | |
| | | *TOTALS | | | | | | | | | | | | | | | | | | | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue